

REMARKS

This Amendment And Response To Non-Final Office Action (the "Amendment") is presented in response to the Office Action mailed January 30, 2007 (the "Office Action.") Reconsideration and allowance of the application is requested in view of the amendments and remarks presented herein. In the Office Action, claims 1, 2, 4, 7-10, 12-13, 16-17 and 20-21 are rejected under 35 U.S.C. section 101 as being directed to non-statutory subject matter. Also, claims 1, 2, 4, 7-10, 12-13, 16-17 and 20-21 are rejected under 35 U.S.C. section 112 as being indefinite. Applicants respectfully traverse each of the rejections as set forth in the Office Action.

In the Amendment, claims 1, 16 and 21 have been amended and new claim 23 has been added. No new matter has been added. Accordingly, upon entry of this Amendment, claims 1, 2, 4, 7-10, 12-13, 16-17, 20-21 and 23 will be pending.

Applicants would like to thank the Examiner for the courtesies extended during the telephone interview of January 26, 2007. In that call, Applicants and the Examiner discussed the section 101 rejections to independent claims 1, 16, 20 and 21. No agreement was reached.

I. Rejections Under 35 U.S.C. § 101

As discussed during the telephonic interview of January 26, 2007, Applicants have herein amended independent claims 1 and 21 to recite, "encrypting a clear text message utilizing the block substation table," and claim 16 to recite, "encrypting a clear text message utilizing the substation table." Applicants submit

that this step of "encrypting" brings about a practical application utilizing the claimed substitution table. See MPEP § 2106.02. Accordingly, Applicants submit that independent claims 1, 16 and 21, as well as claims 2, 4, 7-10, 12-13 and 17 that depend directly or indirectly therefrom recite patentable subject matter under 35 U.S.C. section 101.

Applicants further submit that claim 20 and new claim 23 also recite patentable subject matter under 35 U.S.C. section 101. When a claim recites a data structure or computer program as part of an otherwise statutory machine or manufacture, the claim recites statutory subject matter under 35 U.S.C. section 101 regardless of whether it also recites the computer program or data structure:

Computer programs are often recited as part of a claim. USPTO personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim.

MPEP § 2106.01(I). Claim 20 recites a "system, comprising: a communication link; a first computer . . . ; and a second computer." New claim 23 recites, "A computer system . . . comprising a computer . . ." These systems recited by claims 20 and 23 are otherwise statutory manufactures and/or machines. Accordingly, Applicants submit that claims 20 and 23 recite statutory subject matter under 35 U.S.C. section 101. See *id.*

II. Rejections Under 35 U.S.C. § 112, ¶2

In the Office Action, the Examiner again rejects claims 1, 2, 4, 7-10, 12, 13, 16, 17, 20 and 21 under 35 U.S.C. section 112, paragraph 2 for including the phrase "maximal non-linear" which is considered indefinite. Applicants note that:

The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph. Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification.

MPEP § 2173.05(b) (Internal citations omitted).

In this case, Applicants submit that, at least, one of ordinary skill in the art would understand what is meant by "maximal non-linear" and would know how to determine whether a given block substitution table was "maximal non-linear." It is well known in the art that there is a maximal value for the non-linearity of a mapping that cannot be exceeded. Applicants submit that the phrase "maximal non-linear" refers to this highest achievable degree of non-linearity. Applicants also submit that it is well within the level of ordinary skill in the art to determine whether a particular mapping is maximally non-linear.

Applicants further submit that the phrase "maximal non-linear" can be distinguished from the examples of indefiniteness given in the MPEP because it is not necessary to compare a mapping to any other mappings in order to determine whether it is maximally non-linear. See § 2173.05(b)(F). For example, the MPEP cites the terms "comparable" or "superior" as examples of indefinite terms. The terms "comparable" and "superior," when used to describe an object, have no

concrete meaning except by comparison to a second object or group of objects. In contrast, to determine if a mapping is maximally non-linear, it is only necessary to compare its non-linearity to the theoretical limit of non-linearity, not to any other mapping.

For at least these reasons, Applicants submit that the use of the phrase “maximal non-linear” does not render the above claims indefinite under 35 U.S.C. section 112, paragraph 2.

III. Allowable Subject Matter

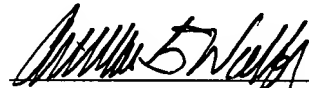
In the Office Action, the Examiner indicates that claims 1, 2, 4, 7-10, 12-13, 16-17 and 20-21 would be allowable if amended to overcome the rejections under 35 U.S.C. section 101. Applicants have herein amended claims 1, 16 and 21 to overcome the section 101 rejections, and pointed out the reasons that claim 20 and new claim 23 do recite statutory subject matter under section 101. Applicants have also pointed out reasons that the claims are not indefinite under section 112. Accordingly, Applicants submit that independent claims 1, 16, 20, 21 and 23, along with claims 2, 4, 7-10, 12-13 and 17 that depend directly or indirectly therefrom, are in condition for allowance.

CONCLUSION

Applicants respectfully request a Notice of Allowance for the pending claims in the present application. If the Examiner is of the opinion that the present application is in condition for disposition other than allowance, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below in order that the Examiner's concerns may be expeditiously addressed.

Respectfully submitted,

Date: 5/14/07



Christopher G. Wolfe
Reg. No. 56264

KIRKPATRICK & LOCKHART PRESTON GATES ELLIS LLP
Henry W. Oliver Building
535 Smithfield Street
Pittsburgh, PA 15222

Ph. (412) 355-6798
Fax (412) 355-6501
christopher.wolfe@klgates.com
Customer No. 26285